

Appln No. 10/632,338
Amdt date May 8, 2006
Reply to Office action of February 17, 2006

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A centrifugal pump comprising a casing having two casing sections with each casing section comprising an external shell and an inner shell defining a gap therebetween; defining a casing cavity defined by the two inner shells having an electrical motor comprising a motor casing having two ends and a side positioned ~~therebetween~~ mounted inside the casing cavity having a motor shaft protruding from one of the ends, a seal mounted on the motor shaft for ~~detering fluids from leaking into~~ sealing an interior space of the motor casing, an impeller mounted on an end of the motor shaft adjacent the seal; and a flow channel formed between an inlet nozzle and an outlet nozzle inside the casing cavity adapted to permit fluids drawn from the inlet nozzle to flow over at least a portion of the side of the electrical motor to cool the electrical motor before exiting the outlet nozzle.

2. (Original) The centrifugal pump of claim 1, wherein the casing comprises a geometrical shape comprising a large mid-section and two tapered ends.

3. (Original) The centrifugal pump of claim 2, wherein the inlet nozzle is positioned on one of the tapered ends and the outlet nozzle is positioned on the other tapered end.

4. (Original) The centrifugal pump of claim 1, wherein the impeller is a closed impeller.

5. (Original) The centrifugal pump of claim 1, further comprising a pump base.

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6. (Original) The centrifugal pump of claim 1, wherein the motor comprises a motor flange and wherein a mounting gland is compressed against the motor flange with an O-ring compressed therebetween.

7. (Original) The centrifugal pump of claim 1, wherein one of the two casing sections comprises a terminal nozzle for terminating a power cord.

8. (Currently amended) A method for pumping fluids using a centrifugal pump comprising:

connecting an inlet line and an outlet line to a pump casing, the pump casing comprising an inlet nozzle located on an inlet housing cover and an outlet nozzle located on an outlet housing cover,

turning on an electrical motor comprising a motor casing having two ends, a side ~~positioned therebetween~~, and a motor shaft extending through one of the ends; the motor being mounted to the outlet housing cover and having a motor electrical cover covering the end of the electrical motor opposite the shaft end and being disposed radially between the pump casing and the motor casing;

passing fluids through the inlet nozzle and out the outlet nozzle by generating a suction at the inlet nozzle with an impeller mounted on an end of the motor shaft;

~~detering seepage of fluids into an interior cavity of~~ sealing the electrical motor by sealing the end with the motor shaft with a dynamic packing or a mechanical seal; and

cooling the electrical motor by providing a flow passage between the inlet nozzle and the outlet nozzle and allowing at least a portion of the fluids to flow pass at least a portion of the side of the motor casing before exiting the outlet nozzle.

9. (Original) The method for pumping fluids of claim 8, wherein the casing comprises a geometrical shape having a large mid section and two tapered ends.

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10. (Original) The method for pumping fluids of claim 8, wherein the impeller is a closed impeller.

11. (Original) The method for pumping fluids of claim 8, wherein the electrical motor comprises a power lead connected to a power cord, and wherein the power cord extends through a terminal nozzle located on the casing.

12. (Original) The methods for pumping fluids of claim 9, wherein the inlet nozzle and the outlet nozzle are located on the tapered ends.

13. (Original) The methods for pumping fluids of claim 9, wherein the casing comprises a parting line sealed by fastening a plurality of fastener means and compressing a compressible seal therebetween.

14. (Currently amended) A centrifugal pump comprising an electrical motor having a motor casing, a motor shaft and an impeller mounted on the motor shaft positioned inside an interior cavity of a pump casing having a parting line, the pump casing comprising an inlet nozzle on one side of the parting line and an outlet nozzle on an opposite side of the parting line, a flow channel extends between the inlet nozzle and the outlet nozzle ~~with at least a portion of the flow channel is defined by the casing and an outside section of the electrical motor~~, the flow channel being formed interiorly of the pump casing and comprises a center flow section and two arcuate side interface sections with the center flow section being spaced radially apart from the motor casing a greater distance than the two arcuate side interface sections for channeling fluid flow through the flow channel; and at least one support leg located on an exterior surface of the casing for supporting the centrifugal pump.

15. (Currently amended) The centrifugal pump of claim 14, ~~wherein the outside section of the electrical motor that defines part of the flow channel comprises~~ further comprising

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a motor electrical cover positioned over an end of the ~~electrical-motor casing~~ comprising an indentation section.

16. (Original) The centrifugal pump of claim 15, further comprising a mounting gland mounted to the motor electrical cover with a gasket or an O-ring positioned therebetween.

17. (Original) The centrifugal pump of claim 14, wherein the casing has a football shape configuration.

18. (Original) The centrifugal pump of claim 14, wherein the impeller is a closed impeller.

19. (Original) The centrifugal pump of claim 14, further comprising a pump base attached to the at least one support leg.

20. (Original) The centrifugal pump of claim 14, wherein the motor is rated for 110-volt service.

21. (Currently amended) A centrifugal pump comprising a pump casing having two casing sections removeably attached to one another at a parting line, the two casing sections defining an interior cavity having an electrical motor comprising a motor housing having a motor shaft ~~extending projecting through from one an end of the motor housing and having an impeller mounted on the motor shaft thereon and having an opposite end wholly encased inside the motor housing positioned inside the pump casing interior cavity,~~ wherein the pump casing comprises a geometrical shape having a large mid-section and two tapered ends with an inlet nozzle on one of the tapered ends and a outlet nozzle on the other tapered end.

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22. (New) The centrifugal pump of claim 21, further comprising a pump base for mounting the pump in a generally horizontal configuration relative to the ground.

23. (New) The centrifugal pump of claim 21, further comprising a carrying handle having two terminal ends projecting through the pump casing and pivotable relative to the pump casing.

24. (New) The centrifugal pump of claim 21, further comprising an electrical motor casing positioned internally of the two casing sections and surrounding at least a portion of the motor housing.